

### AMENDMENTS TO THE CLAIMS

Please add or amend the claims to read as follows, and cancel without prejudice or disclaimer to resubmission in a divisional or continuation application claims indicated as cancelled:

1-23. (Canceled)

24. (Currently Amended) A method of imaging diagnostic information ~~[[of]]~~ of the GI tract, the method comprising:

administering to a patient an ingestible imaging capsule;

administering to a patient a composition comprising a fluorescent dye;

flashing illumination within the GI tract, thereby providing a light period and a dark period;

obtaining a white light image of the GI tract during the light period and a successive fluorescent image of the GI tract tissue during the dark period on an image sensor within said ingestible imaging capsule; and

wirelessly transmitting the white light image data and the fluorescent image data from the ingestible imaging capsule.

25. (Cancelled)

26. (Cancelled)

27. (Previously Presented) The method of claim 24 wherein flashing comprises alternately illuminating with white light.

28. (Cancelled)

29. (Currently Amended) The method of claim 24 comprising focusing light remitted from the GI tract tissue onto ~~[[an]]~~ the image sensor within the ingestible capsule.

30. (Previously Presented) The method of claim 24 wherein flashing comprises alternately illuminating with monochromatic light and white light.

31. (Currently Amended) The method of claim ~~[[25]]~~ 24 comprising processing the real white light image and the fluorescent image to obtain diagnostic information.

32-34. (Canceled)

35. **(Currently Amended)** A method comprising:

staining cells of an endo-luminal wall;  
administering to a patient an in-vivo imaging capsule;  
activating illumination of the in-vivo imaging capsule in a flashing mode having alternating light and dark periods; and  
capturing light remitted from said cells during the a light period of the flashing mode from said cells onto a light detector within the in-vivo imaging capsule, thereby providing a white light image; and

capturing light remitted from said cells during a successive dark period of the flashing mode onto the light detector, thereby providing a successive fluorescent image.

36. **(Previously Presented)** The method as in claim 35, wherein said illumination comprises a polychromatic illumination and a monochromatic illumination.

37. **(Cancelled)**

38. **(Previously Presented)** The method according to claim 24, wherein said composition administered further comprises an antibody to an antigenic determinant associated with GI cancer.

39. **(Previously Presented)** The method according to claim 38, wherein said antibody is specific to an antigenic determinant selected from a group consisting of: CA19 9 and CEA.

40. **(Previously Presented)** The method according to claim 24, wherein said composition comprises an antigenic determinant with affinity to antibodies associated with GI cancer.

41. **(Previously Presented)** The method according to claim 40, wherein said antigenic determinant is Gastric Mucin.

42. **(Previously Presented)** The method according to claim 24, comprising the step of washing the GI tract tissue, prior to administering a composition.

43. **(Previously Presented)** The method according to claim 24, further comprising the step of washing the GI tract tissue from excess of fluorescent dye, prior to administering the ingestible imaging capsule.

44. **(Previously Presented)** The method according to claim 35, further comprising the step of washing the endo-luminal cells from excess of stain, prior to administering the in-vivo imaging capsule.

45. **(New)** The method of claim 31, wherein processing the white light image and the fluorescent image to obtain diagnostic information comprises comparing the white light image with the successive fluorescent image.

46. **(New)** The method of claim 35 comprising processing the white light image and the fluorescent image to obtain diagnostic information.

47. **(New)** The method of claim 46, wherein processing the white light image and the fluorescent image to obtain diagnostic information comprises comparing the white light image with the successive fluorescent image.